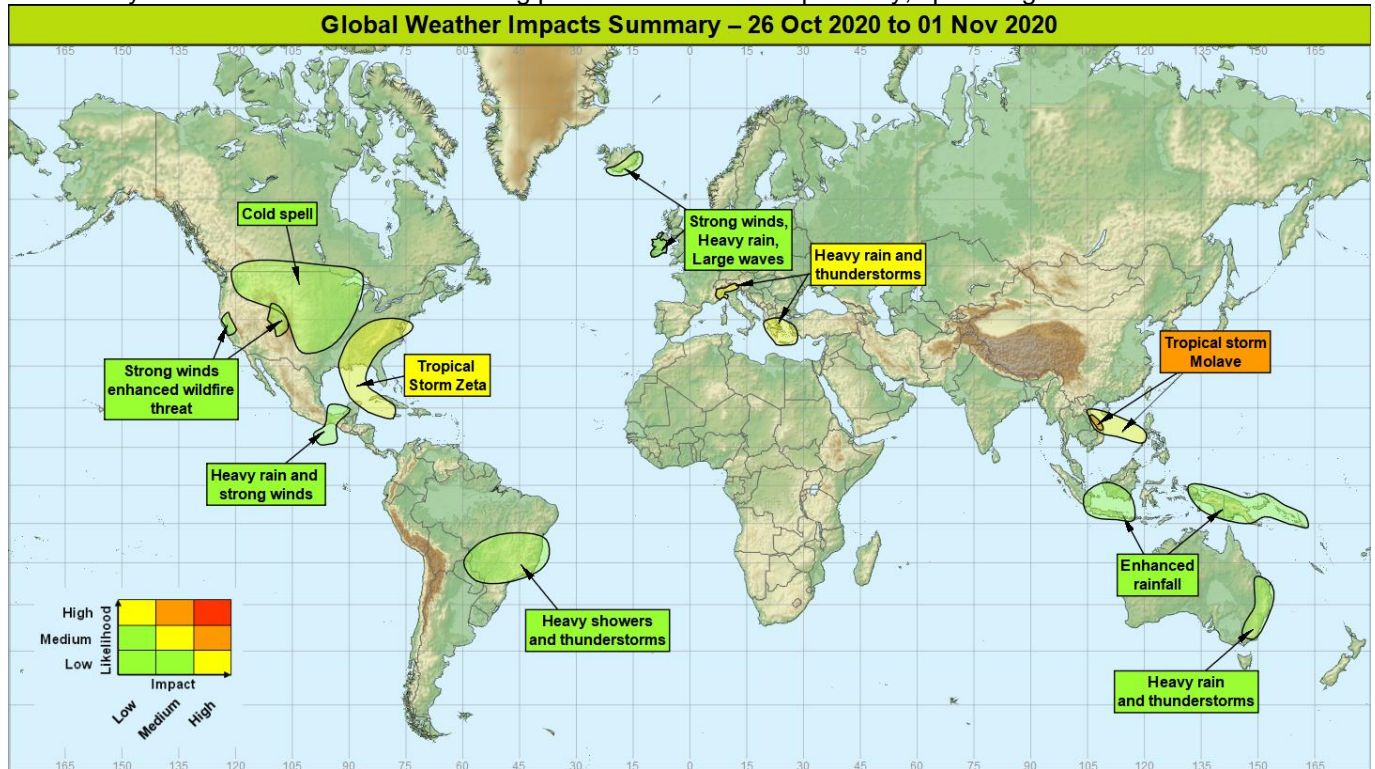


Global Weather Impacts – Monday 26th October to Sunday 1st November 2020

Issued on Monday 26th October 2020

HEADLINES

- Typhoon Molave affecting Vietnam by midweek.
- Tropical Storm Zeta affecting Mexico and the US Gulf coastline later in the week.
- Heavy rain and thunderstorms affecting parts of southern Europe today, spreading east this week.



Tropical Cyclones

Typhoon Molave (South China Sea and Vietnam)

Weather

This system strengthened on Sunday to be named typhoon Molave as it approached the northern Philippines. Molave is expected to turn northwest towards Vietnam now that it has exited Luzon and is over the warm waters of the South China Sea. It is expected to make landfall close to or just south of Da Nang on Wednesday as a typhoon (10-minute sustained winds of at least 73mph) before rapidly weakening and decaying into Thursday. Molave could bring widespread daily rainfall of 200mm with peak 24 hour totals of up to 500mm (over saturated ground) with totals in the coming week near to another 1000mm in one or two places. This could be the strongest tropical cyclone of the season so far with hurricane force winds and a significant storm surge likely. These severe weather conditions are likely to affect parts of Vietnam already suffering from severe flooding and several tropical storm impacts following Saudel.

Discussion

The tropical depression that developed out of an active Rossby Wave couplet in recent days strengthened to be named a tropical storm on Saturday night. Despite having crossed the Philippines yesterday all models show this system strengthening across the warmer than average waters of the South China Sea. There is good model agreement now for this system to maintain typhoon strength and for a landfall on Wednesday close to or just south of Da Nang.

Expected Impacts

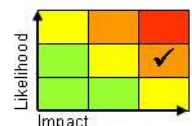
Further flash and river flooding looks likely, with the additional hazards of coastal flooding from the storm surge and wind damage from hurricane force winds.

This forecast may be amended at any time

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Tropical storm Zeta (western Caribbean, southeast Mexico and the USA Gulf coastline)

Weather

A broad area of showers and thunderstorms in the western Caribbean developed into tropical storm Zeta yesterday. The system is expected to slowly track northwest today, producing areas of heavy showers and thunderstorms that could bring a further 70-100mm of rain to parts of Cuba and the Cayman Islands. During Tuesday it is expected to continue northwest close to, or across the Yucatan Peninsula probably strengthening to a hurricane for a time ahead of this (sustained winds of 75mph). It is then expected to turn north on Wednesday, making landfall along the Gulf coastline of the USA on Thursday as a tropical storm, possibly producing 100-250mm of rain in just 36 hours, with this system likely continuing to track northeast across the southeastern US states during the rest of week to extend the area of heavy rainfall.

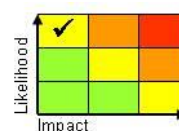
Discussion

An area of thunderstorms strengthened into a tropical depression late Saturday. Further strengthening occurred overnight, with the system becoming tropical storm Zeta yesterday. It is likely to remain in a favourable environment for development over the next couple of days, when the NHC has it attaining Cat 1 wind speeds. Marked shear ahead of an advancing upper trough is then expected to weaken the system before it makes landfall on the Gulf coast some time Weds into Thurs. There remains considerable uncertainty regarding the track by mid-week and thus where Zeta will make landfall over the Gulf coastline.

Expected Impacts

Flash and perhaps river flooding is possible on some western Caribbean Islands as well as the Yucatan Peninsula during the next few days. Flash and possibly coastal flooding along with some minor wind damage is likely for the Gulf coast of the USA later in the week.

No other areas are being monitored for potential tropical cyclone development.



Europe

Parts of Northwest Europe

Weather

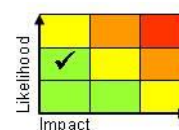
By mid-week the remnants of Hurricane Epsilon (by this point a potent mid-latitude low) will move through the region bringing the risk of 40-60mph gusts to the region, this not long since the previous windy spell over the weekend. In addition to the wind, between 100-120mm of rain could fall across the mountains of the regions.

Discussion

A strong North Atlantic jet stream will drive a few extremely deep mid-latitude lows across the northeast Atlantic over the coming seven days, with the potential for several small scale features developing in their circulations, bringing further wind and rain. The strongest winds associated with the systems look likely to remain out over the open ocean.

Expected Impacts

Most likely minor impacts to travel and utilities, along with dangerous conditions at sea and along the coasts with large waves. Some localised minor flooding is possible in association with the heavy rainfall.



Parts of southern Europe

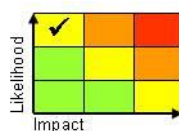
Weather

Heavy rain and thunderstorms are expected to produce up to 100-150mm of rain in just 24 hours across parts of northern Italy today (Monday), with the peak rainfall and thunderstorm activity then likely to transfer to parts of Greece and western Turkey on Wednesday where 50-100mm of rain could fall in 24 hours.

Discussion

An extending upper trough will engage a warm plume to produce deep convection and large upslope rainfall across northern Italy today (Monday). The upper trough will then engage a plume in the Central Mediterranean that could steer deep convection across Crete, southern Greece and western Turkey on Wednesday.

Expected Impacts



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Flash flooding and landslides look likely to be the main impacts. There is the potential for wind damage on Wednesday due to tornadoes

North America

Northern Plains and North Rockies, USA and parts of southern Canada

Weather

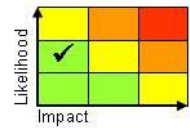
An early season cold spell is underway across northern parts of the USA and southern Canada with temperatures falling to 15-20°C below average in places. This spell will bring a range of hazards including snowfalls, ice and overnight frost. Temperatures will moderate from the west late next week.

Discussion

Cyclogenesis across the Great Lakes and eastern Canada has drawn an area of arctic air south to areas east of the Great Continental Divide. This will be re-enforced by further lee cyclogenesis across the central USA today (Monday), allowing the cold air to reach as far south as Colorado or Oklahoma for a short time this week.

Expected Impacts

Minor transport disruption and health impacts for vulnerable and exposed populations.



California, large parts of Colorado and southern Oregon

Weather

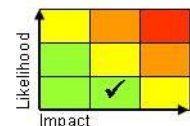
The cold outbreak described above will likely bring very dry air and strong and gusty winds to these areas. With several wildfires already burning in the region (as seen in satellite imagery), these winds could cause existing and any new fires to quickly grow and spread, and be challenging for emergency responders to control.

Discussion

Strong pressure gradients across the area, including the Sierra Nevada Mountains will produce various surges in these extremely dry (due to lee subsidence over the Sierra Nevada) and gusty north-easterly winds. Gusty winds elsewhere will have the same effect in fire maintenance and spread.

Expected Impacts

Growth and spread of new and ongoing wildfires, bringing a risk to both property and life in some localised regions. Smoke could disrupt some transport, and reduce air quality.



Southeastern USA – See *Tropical Cyclone* section.

Central America and the Caribbean – See *Tropical Cyclone* section.

Southern Mexico

Weather

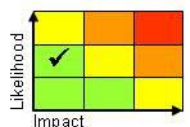
Heavy rain and strong northerly winds will affect this area through the end of this week and into the weekend. 150-250mm of rain could fall in less than 24hrs on Friday, along with strong to gale force northerly winds. These winds will funnel through the Chivela Pass and out over the Gulf of Tehuantepec, possibly reaching speeds of 60-80KT.

Discussion

A cold surge behind the departing Zeta will bring a strong northerly flow across the Gulf of Mexico and will funnel through the Chivela Pass.

Expected Impacts

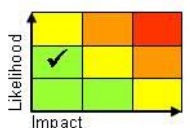
Flash and riverine flooding, landslides in steeper terrain, as well as strong wind impacts. Also dangerous sea conditions over the Gulf of Tehuantepec.



South America

Parts of Paraguay, Bolivia, and eastern Brazil

Weather



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Intense showers and severe thunderstorms will develop at times across these areas over the course of the next week. These have the potential to produce 50-75mm of rain in just a few hours along with a threat of strong winds, large hail and frequent lightning.

Discussion

A southward extension of the very warm, moist monsoon plume into northern Argentina will be engaged by several upper troughs through the next 7 days to produce high CAPE, marked wind shear and deep convection. There is the potential for a tropical or sub-tropical storm to develop early in the week off the Brazilian coastline

Expected Impacts

Local flash flooding probable with a lower likelihood of damage from hail, wind and lightning in the area.

Africa

Nil.

Middle East

Nil.

Asia

Vietnam and southern China– See *Tropical Cyclones* section.

Parts of Indonesia, Papua New Guinea and the Solomon Islands

Weather

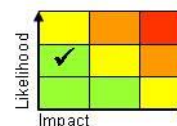
Slightly enhanced showers and thunderstorms are expected across this region in the coming week, some places could receive 25-75mm in 3-6 hours, and overall widely 50-100mm will fall across the region. This following recent anomalous rainfall in the last few weeks.

Discussion

La Nina makes showers and thunderstorms more likely to be frequent across the Maritime Continent. This potentially aided too by a slowly progressive MJO. Monthly anomalies across this region are generally positive too making impacts more likely than usual.

Expected Impacts

Localised flash flooding in places, and increased risk of landslides in higher terrain.



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Australasia

Eastern Australia

Weather

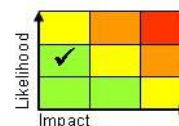
Heavy rain and thunderstorms are likely to continue across this area through the first half of this week. Most areas will avoid the heaviest rain but there is the potential for 100-150 mm to fall in places. This is well in excess of typical October rainfall amounts. Drier conditions are expected to follow from the west from mid-week.

Discussion

A slow-moving high WBPT plume eastern Australia will continue to be engaged by a trough extending northeast over Australia. This will lead to a developmental environment with frontal waves likely to form and with thunderstorms breaking out in the higher WBPT environment before the front clears eastwards.

Expected Impacts

Continued threat of flash flooding in places.



Papua New Guinea and the Solomon Islands – See *Asia* section.

Additional Information

Cox's Bazar, southeast Bangladesh

After recent heavy rains Cox's Bazar will see a much reduced spell of rainfall through the next 7 days, although there will likely be some showers or even thunderstorms most days. However, the likelihood of flash flooding and landslides will be much lower than in recent days.

Yemen

The development of a very isolated heavy showers is possible over the Western Highlands, though this risk lower than in recent days. As is typical for this time of year, most places will be dry throughout. There is the potential for heavy showers and thunderstorms to move westwards from the Arabian Sea into the island of Socotra from midweek.

Sudan/South Sudan

The vast majority of Sudan will stay dry through the next 7 days, which is usual for this time of year. Daily showers and thunderstorms will continue across much of South Sudan with 7 day rainfall accumulations of 25-50mm likely in a few places, although the north of South Sudan looks like remaining mostly dry

Issued at: 260800 UTC

Meteorologists: Ele Hands / Chris Almond

Global Guidance Unit

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